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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/826,716	04/05/2001	Michael Karpusas	A062 US	4368

7590
Niki D. Cox
Biogen, Inc.
14 Cambridge Center
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06/08/2004

EXAMINER

BORIN, MICHAEL L

ART UNIT PAPER NUMBER

1631

DATE MAILED: 06/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/826,716	Applicant(s) KARPUSAS ET AL.	
	Examiner Michael Borin	Art Unit 1631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 1-19 and 21-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Status of Claims

1. Amendment filed 02/19/2004 is acknowledged.

Claims 1-33 are pending. Claim 20 is under consideration. Claims 1-19, 21-33 remain withdrawn from further consideration. Cancellation of claims 1-19, 21-33 is repeatedly requested.

Claim Rejections - 35 USC § 102 and 103

2. Claim 20 remain rejected under 35 U.S.C. 102(b) as anticipated by Holmvall et al or Pfaff et al or Kern et al. The rejection is maintained for the reasons of record.

Applicant submits that amendment to the claims overcomes the rejection. Examiner maintains that Holmvall et al or Pfaff et al, or Kern et al., which are exemplary references, all describe employing experimental means to interact $\alpha 1\beta 1$ integrin with a putative ligand (such as collagen II or collagen IV) and analyzing results of this interaction, thus evaluating - using the language of instant claims - the ability of collagen (i.e., of a chemical entity) to interact with $\alpha 1\beta 1$ integrin. Note that the method steps of obtaining data "related" to said association and analyzing the characteristics of the association read on any experimental or computational method which addresses interaction of $\alpha 1\beta 1$ integrin with a ligand. Performing "fitting operation" broadly reads on performing any interaction $\alpha 1\beta 1$ integrin with a putative ligand, as results of such interaction reflect whether the putative ligand "fits" $\alpha 1\beta 1$ integrin or not. Consequently the method as claimed is anticipated by the exemplary references used in the rejection.

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3. Claim 20 remain rejected under 35 U.S.C. 103(a) as obvious over Qu et al. The rejection is maintained for the reasons of record.

Applicant does not present arguments addressing this particular rejection. Examiner does not see amendment to the claim, which specifies I domain of $\alpha 1\beta 1$ integrin complex, as amendment that overcomes rejection directed to obvious use of this I domain.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Borin whose telephone number is (571) 272-0713. Dr. Borin can normally be reached between the hours of 8:30 A.M. to 5:00 P.M. EST Monday to Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Michael Woodward, can be reached on (571) 272-0722.

Any inquiry of a general nature or relating the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-0549.

June 3, 2004

mlb

MICHAEL BORIN, PH.D
PRIMARY EXAMINER

